

### **Amendments to the Claims**

The following listing of claims will replace all prior versions and listings of claims in the application.

### **Listing of Claims**

Claims 1 – 104 (canceled)

Claim 105 (currently amended) A method for analyzing a biological sample, the method comprising the steps of:

illuminating a plurality of substantially non-overlapping regions of a sample with electromagnetic radiation using illuminating optics; and  
collecting electromagnetic radiation emanating from ~~sequential~~ said regions of said sample using collecting optics, wherein said illuminating optics and said collecting optics are disposed in a ~~emanating electromagnetic radiation is substantially confocal configuration with electromagnetic radiation provided in said illuminating step; and~~  
~~analyzing said collected electromagnetic radiation in order to determine characteristics of said sequential regions.~~

Claim 106 (previously presented) The method of claim 105, wherein said illuminating step comprises focusing said illuminating radiation on said sample using a movable mirror.

Claim 107 (previously presented) The method of claim 105, wherein said collecting step comprises focusing said emanating radiation on a detector using a movable mirror.

Claim 108 (currently amended) The method of claim 105, ~~wherein said analyzing step comprises~~ further comprising the step of detecting said ~~emanating radiation and~~ electromagnetic radiation emanating from a region of said sample and comparing said ~~emanating radiation obtained from a region of said sample to a~~ at least one standard.

Claim 109 (currently amended) The method of claim 105, wherein said sample ~~is~~ comprises biological tissue.

Claim 110 (currently amended) The method of claim 109, wherein said biological tissue is comprises cervical tissue.

Claim 111 (currently amended) The method of claim 105, further comprising the step of diagnosing a disease state based upon a comparison of said ~~emanated~~ emanating electromagnetic radiation to one or more standards indicative of various states of health.

Claim 112 (canceled)

Claim 113 (currently amended) The method of claim 105, wherein predetermined wavelengths of said emanating electromagnetic radiation are selected for analysis ~~in said analyzing step~~.

Claim 114 (canceled)

Claim 115 (currently amended) The method of claim 105, wherein said illuminating and emanating electromagnetic radiation pass through at least a portion of a sheath.

Claim 116 (previously presented) The method of claim 108, wherein an array of detectors detects said emanating radiation.

Claim 117 (previously presented) The method of claim 116, wherein said array of detectors comprises optical elements and processors.

Claim 118 (previously presented) The method of claim 107, wherein said movable mirror comprises a beam splitter to split said emanating radiation into a plurality of individual wavelengths.

Claim 119 (previously presented) The method of claim 118, wherein said beam splitter is a spectrometer.

Claim 120 (previously presented) The method of claim 105, further comprising the step of controlling a field stop in order to probe a volume element of said sample.

Claim 121 (currently amended) The method of claim 120, wherein ~~said field stop has a dimension that is large compared to a quotient formed by division of a wavelength of said emanating electromagnetic radiation by a numerical aperture of an optical assembly used to illuminate~~ a dimension of said field stop allows non-diffraction-limited illumination of said volume element of said sample.

Claim 122 (previously presented) The method of claim 120, wherein said controlling step comprises controlling an array of field stops in order to probe a volume element of said sample.

Claim 123 (previously presented) The method of claim 120, wherein said field stop is controlled by a movable mirror.

Claim 124 (previously presented) The method of claim 105, wherein said sample is illuminated using a plurality of movable mirrors.

Claim 125 (previously presented) The method of claim 106, wherein said mirror is a beam splitter.

Claim 126 (previously presented) The method of claim 115, wherein said sheath is a single-use disposable sheath.

Claims 127 – 147 (canceled)

Claim 148 (new) The method of claim 105, further comprising the step of analyzing said collected radiation to determine one or more characteristics of said sample.

Claim 149 (new) The method of claim 105, wherein said illuminating step comprises sequentially illuminating said plurality of non-overlapping regions of said sample.

Claim 150 (new) The method of claim 108, wherein said detected radiation comprises at least one of scattered radiation and fluorescent radiation.

Claim 151 (new) The method of claim 120 wherein said field stop comprises a material selected from the group consisting of a liquid crystal, a ferroelectric element, a polymer dispersed liquid crystal, and an electromechanical shutter.

Claim 152 (new) An apparatus for analyzing a biological sample, comprising:  
illuminating optics for sequentially illuminating a plurality of substantially non-overlapping regions of a sample with electromagnetic radiation; and  
collecting optics for collecting electromagnetic radiation emanating from said regions of said sample, wherein said illuminating optics and said collecting optics are disposed in a substantially confocal configuration.

Claim 153 (new) The apparatus of claim 152, wherein said illuminating optics comprises a movable mirror for focusing said illuminating radiation on said sample.

Claim 154 (new) The apparatus of claim 152, further comprising at least one detector for detecting said emanating radiation.

Claim 155 (new) The apparatus of claim 154, wherein said collecting optics comprises a movable mirror for focusing said emanating radiation on said at least one detector.

Claim 156 (new) The apparatus of claim 155, wherein said movable mirror comprises a beam splitter.

Claim 157 (new) The apparatus of claim 152, wherein said sample comprises biological tissue.

Claim 158 (new) The apparatus of 157, wherein said biological tissue comprises cervical tissue.

Claim 159 (new) The apparatus of claim 152, further comprising a sheath for preventing contact between said apparatus and said sample.

Claim 160 (new) The apparatus of claim 159, wherein said sheath is configured to allow transmission of said illuminating and said emanating radiation.

Claim 161 (new) The apparatus of claim 152, further comprising at least one field stop for targeting said illuminating radiation to a volume element of said sample.

Claim 162 (new) The apparatus of claim 161, wherein a dimension of said at least one field stop allows non-diffraction-limited illumination of said volume element of said sample.

Claim 163 (new) The apparatus of claim 152, further comprising an array of field stops for targeting said illuminating radiation to a plurality of volume elements of said sample.

Claim 164 (new) The apparatus of claim 152, further comprising a plurality of mirrors for illuminating said regions of said sample.

Claim 165 (new) The apparatus of claim 154, wherein said at least one detector comprises at least one optical element and at least one processor.

Claim 166 (new) The apparatus of claim 154, wherein said detector is adapted to detect at least one of scattered radiation and fluorescent radiation.

Claim 167 (new) The apparatus of claim 159, wherein said sheath is a single-use disposable sheath.

Claim 168 (new) The apparatus of claim 161, further comprising a mirror for controlling said at least one field stop.

Claim 169 (new) The apparatus of claim 161, wherein said at least one field stop comprises a material selected from the group consisting of a liquid crystal, a ferroelectric element, a polymer dispersed liquid crystal, and an electromechanical shutter.